WHAT IS CLAIMED IS:

1. A method for forming an electronic device, comprising:

providing a substrate having a front side and a back side, said front side having a layer disposed thereon including a material having a low melting point;

implanting an impurity into said back side of said substrate;

flashing said back side of said substrate with radiation energy which impinges on a surface of said back side of said substrate for a substantially instantaneous time to heat an active layer of said substrate to an annealing temperature.

2. The method of Claim 1, wherein said radiation energy is derived from a radiation energy source comprising a high-intensity lamp.

3. The method of Claim 2, wherein said high-intensity lamp comprises a Xe arc lamp.

4. The method of Claim 1, wherein said low melting point is in the range of between 100° C and 1400° C.

5. The method of Claim 1, wherein said radiation energy comprises an average power of between about 0.5 J/cm^2 and about 100 J/cm^2.

6. The method of Claim 1, wherein said active layer comprises a portion of said substrate between 10 nm and about 1 mm below a surface of said substrate.

7. The method of Claim 1, wherein said annealing temperature is between about 500 °C and 1400 °C.

8. The method of Claim 1, wherein said substantially instantaneous time is between about 1 nanosecond and about 10 seconds.

9. The method of Claim 1, wherein said implanting an impurity into said back side of said substrate comprises accelerating dopant ions to between 20 keV and 100 keV into said back side surface.

10. The method of Claim 1, wherein said implanting an impurity into said back side of said substrate comprises thermally diffusing a dopant in a gaseous ambient.

11. A method for forming an electronic device, comprising:

providing a substrate having a front side and a back side, said front side having a first semiconductor device disposed thereon;

removing substrate material from said back side of said substrate;

implanting an impurity into said back side of said substrate;

flashing said back side of said substrate with radiation energy which impinges on a surface of said back side of said substrate for a substantially instantaneous time to heat an active layer of said substrate to an annealing temperature; and

forming a second semiconductor device on said back side of said substrate.

12. An apparatus for forming an electronic device, comprising:

means for flashing a first surface of a substrate with radiation energy which impinges on said first surface for a substantially instantaneous time to heat an active layer of said substrate to an annealing temperature, said substrate having a second surface having a semiconductor device formed thereon.

13. The apparatus of Claim 12, wherein said means for flashing comprises:

at least one radiation energy source; and

a reflector assembly substantially surrounding said at least one radiation energy source, said reflector assembly including a reflective surface for focusing radiation energy from said radiation energy source to impinge on said first surface.

14. The apparatus of Claim 12, wherein said substantially instantaneous time comprises between about 1 nanosecond and about 10 seconds.

15. The apparatus of Claim 12, wherein said annealing temperature comprises between about 500 °C and about 1400 °C.

16. The apparatus of Claim 13, wherein said radiation energy source comprises a Xe arc lamp.

17. The apparatus of Claim 12, wherein said active layer comprises a portion of said substrate which extends from between said first surface to about 1 mm below said first surface of said substrate.

18. The apparatus of Claim 12, wherein said radiation energy comprises an average power of between about 0.5 J/cm^2 and about 100 J/cm^2.

19. The apparatus of Claim 12, wherein said active layer comprises a portion of said substrate from between said first surface and a depth below said first surface in the range of between about 10 nm and about 1 mm.